

REMARKS

Claims 1-22 are pending. Of those, claims 1, 9 and 15 are independent. Claims 21-22 have been added by this reply.

Claim Rejection under 35 U.S.C. §103

Beginning on page 2 of the Office Action Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pre-Grant Application Publication (hereafter "PGPub") No. US 2002/0133507 to Holenstein et al. in view of U.S Patent 6, 477,561 to Robsman (the '561 patent). Applicants traverse.

The Examiner acknowledges that the '507 PGPub does not disclose starting a non-active transaction service thread conditioned upon less than a predetermined maximum number of transaction and service threads being present. But the Examiner goes on to assert that this is taught by the '561 patent and moreover assert that it would have been obvious to modify the '507 PGPub according to the '561 patent. Again, Applicant traverses.

In particular, Applicant disagrees with the Examiner that the '561 patent is a teaching to start a non-active transaction service thread upon satisfying the condition that there are fewer than a predetermined maximum number of transactions service threads present. In support of the assertion, the Examiner directs Applicant's attention to lines 7-10 of col. 5 of the '561 patent. For the reader's convenience, an excerpt (line 56 of col. 4 to line 18) of the '561 patent is reprinted as follows (underlined emphasis added). The excerpt includes the passage relied upon by the Examiner.

As will be described below, two function calls are inserted in the threads themselves to regulate the number of threads that are active at any given time. Such regulation is referred to as "gating." A first function call, referred to as a "gating" function, is inserted in a thread prior to the code that performs the request execution assigned to the thread. A second function call, referred to as an "exit" function, is inserted in the thread subsequent to the code that performs the request execution assigned to the thread.

Together, the two functions implement the gating functions of the invention. The functions keep a current count of the number of "active" execution threads. The term "active" is used herein to indicate a thread that has been initiated with an assigned task request and that has been allowed to continue by the gating function. The functions also maintain a variable limit on the number of active execution threads. Before allowing a thread to continue, the gating function compares the number of active threads to a variable limit. If the limit has already been met, the thread is temporarily delayed (the thread is not allowed to become active). Otherwise, the gating function ends, and the thread continues with its assigned task request (thereby becoming active).

Each time it is called, but no more than once a second, the gating function adjusts the variable limit. Any adjustment depends on the current processor load of the computer. If the processor load is low, the variable limit is increased to allow more threads to execute. If the processor load is high, the variable limit is decreased to allow fewer threads to become active.

Applicant is willing to assume for the sake of argument that the '561 patent represents a teaching to preclude a non-active transaction service thread from being started if the number of transaction service threads currently active is equal to or greater than a predetermined maximum. But that is not what Applicant has claimed. Again, among other things, claim 1 recites starting a non-active service thread conditioned upon less than a predetermined maximum number of transaction service threads being present. The '561 patent teaches precluding a non-active service thread from being started if the number of active threads is equal to or greater than a variable limit.

Applicant acknowledges that if the processor load is low, then the '561 patent teaches that the variable limit (a reference value) can be increased to allow more threads to execute concurrently. But such a teaching by the '561 patent falls short of a teaching that non-active threads should be started if fewer than a predetermined maximum number of active threads exist. Again, the '561 patent teaches precluding non-active threads from being started to avoid exceeding a maximum number of active threads. In contrast, present claim 1 recites starting a non-active service thread to facilitate keeping a minimum number of threads active.

In view of the foregoing discussion, modifying the '507 PGPub according to the '561 patent as asserted by the Examiner would not result in a combination that yielded all elements

of Applicant's claim 1. A distinction of claim 1 over the asserted combination remains starting a non-active service thread conditioned upon less than a predetermined maximum number of transaction service threads being present.

Independent claim 15 recites a feature similar to claim 1, which similarly represents a distinction over the asserted combination. A distinction of independent claim 9 is adding a non-active transaction service thread conditioned upon whether there are less than a predetermined maximum number of transaction service threads present. Claims 2-8, 10-14 and 16-20 depend at least indirectly on claims 1, 9 and 15, and are patentable at least for the same reasons as their corresponding base independent claims, respectively.

In view of the foregoing discussion, the 35 U.S.C. 103(a) rejection is improper and Applicant requests that it be withdrawn.

NEW CLAIMS 21-22

Again, claims 21-22 have been added by this reply, more particularly in dependence from claims 9 and 15, respectively. Thus, claims 21-22 are patentable at least for the same reasoning as claims 9 and 15, respectively.

CONCLUSION

The issues in the case are considered to be resolved. Accordingly, Applicant again requests a Notice of Allowability.

In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact the undersigned to discuss the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-2025 for any additional fees under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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